

## IV THE EVIDENCE OF THE FORGED *SNML* SAMMELBAND BOOK STRUCTURE

### SIDEREUS NUNCIUS

There is no question that the parchment cover of this laced-case binding and its gold-tooled decoration is of a date that more or less matches that of the latest edition contained within it (1655). The case was originally, as now, attached to the bookblock by means of the endband slips, which are laced through the joints of the cover at the head and tail, the joints, or extensions of the transverse spine linings and the endleaves, which are pasted to the inside of the cover. The cover itself is folded over thin boards of cartonnage with a characteristically uneven surface. Trapped under the pastedowns are the stubs of two pairs of orange-pink silk ties. The bookblock was sewn on three single supports of an unknown material, probably cord, using a bypass sewing technique. The edges of the bookblock have been gilded and gauffered. The original endleaves appear to be recent replacements, as do the spine linings and the endbands.

The construction of the binding, however, presents work that is not contemporary with the cover of the binding, and this work can be divided into two parts: that which could be the result of perfectly conventional repairs to an existing binding, and those which can only be explained as the consequence of the insertion into the bookblock of an element that was not originally part of it.

### TREATMENT OF THE TEXTBLOCK

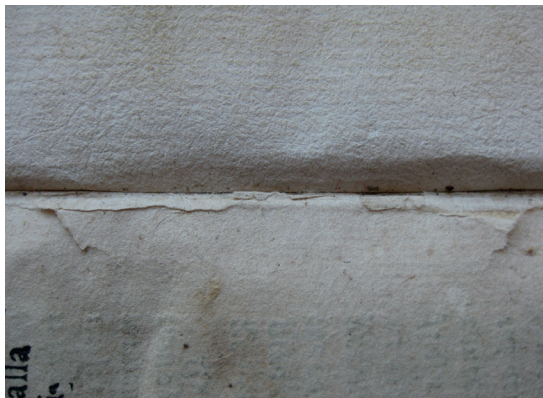
Although the paper on which the *Sidereus Nuncius* (*SNML*) was printed is discussed elsewhere in this volume, the treatment of the paper throughout the volume by the binder(s) in preparation for binding is significant. Traditional hand-printing on dampened paper with a soft blanket in the tympan of the press results in a marked stretching of the paper around the perimeter of the text area of each leaf. The unprinted margins are not stretched, and the consequence is that creases are formed across the centre and the corners of the text area to accommodate the stretched paper. This distortion of the paper is compounded by the shrinkage of the dampened paper as it dries. This makes it impossible for the binder to press the leaves of the textblock between boards without the risk of creating creases in the text area of the paper. In order to consolidate the leaves for sewing, binders therefore used beating hammers to compact all the leaves of a bookblock in groups of gatherings, which, because they did not put the whole surface of the leaves under pressure at any one moment, allowed the distorted leaves to be consolidated without creating sharp creases. The process of beating allows more or less of the impression of the type into the paper to be flattened according

to how heavily and for how long the leaves are beaten, but single small areas of type, such as catchwords or page numbers, often create deep impressions in the paper which the beating process will crush flat. This phenomenon can be seen throughout the later editions (the *Opere*) bound into this volume, but is conspicuously absent from the leaves of the *SNML*, where the deep type impression is left apparently unaffected by the binding process and the paper does not show the same degree of printing distortion. It is impossible to conceive of a seventeenth-century binder leaving one portion of a textblock unbeaten, as there is no reason why they would, and many reasons why they would not. The deep type impression of the *SNML* therefore shows that it was not bound within this cover at the same time as the *Opere*.

## ENDLEAVES

There is a sewn 2-leaf outside-hook endleaf at each end of the book, the spine folds of which are crushed and creased in a way that is not consonant with an undisturbed seventeenth-century binding. The pastedowns are also not marked and creased in the ways that one would expect to find inside a cover that is so extensively marked and worn externally, though the perimeter pasting reflects a typical Italian practice of the period. The spine edge of the verso of the final text leaf is rather worn and damaged and shows traces of an earlier

Fig. 1: Adhesive and skinned paper deposits left by the original flyleaves on the inner margin of the final verso of the last edition in the volume.



endleaf having been adhered to it. There are no traces of wear and adhesive on the facing flyleaf (Fig. 1).

There is also a damp stain in the centre of the lower half of the leaf which is not found in the facing flyleaf. The right flyleaves, adjacent to the textblock, do not show the same distorted shape of the textblock that results from printing by hand on damp paper. The flyleaves and the pastedowns are somewhat unnaturally unmarked and undamaged, and it is a surprise to see a binding of this type (laced-case by means of the endband slips only) with such a worn cover in which the left endleaves in particular have not pulled away from the textblock. The unmarked and undamaged fold of the right endleaves can clearly be seen through a hole made in the right joint of the cover by a now lost central sewing support (see below), indicating that they were added to the book after this damage was sustained.

Although the perimeter pasting used to attach the stubs of the outside hook endleaves and the outer full leaf to the inside of the cover is an authentic seventeenth-century technique, the hard pressing used to ensure adhesion that has moulded the paper of the paste-downs tightly over the endband slips is not, and is out of place in a binding of this age.

In the light of this evidence, there can be little doubt that the present endleaves are later insertions, though it must be said that it is not uncommon for old books to be given new endleaves to replace damaged or missing original endleaves.

## SEWING

Convincing proof that the book has been tampered with is also to be found in the sewing of the bookblock. All the textblock with the exception of the *SNML* is sewn using a bypass technique in which either the central or the two outer supports only in every gathering are sewn around, and the other supports are bypassed. Bypass sewing was in use in France as early as the 1520s and is found in Italian bookbinding from at least the early seventeenth century and is an economy measure that speeded up the time-consuming process of sewing a book, but only at the expense of the strength of its structure. The regular pattern of the

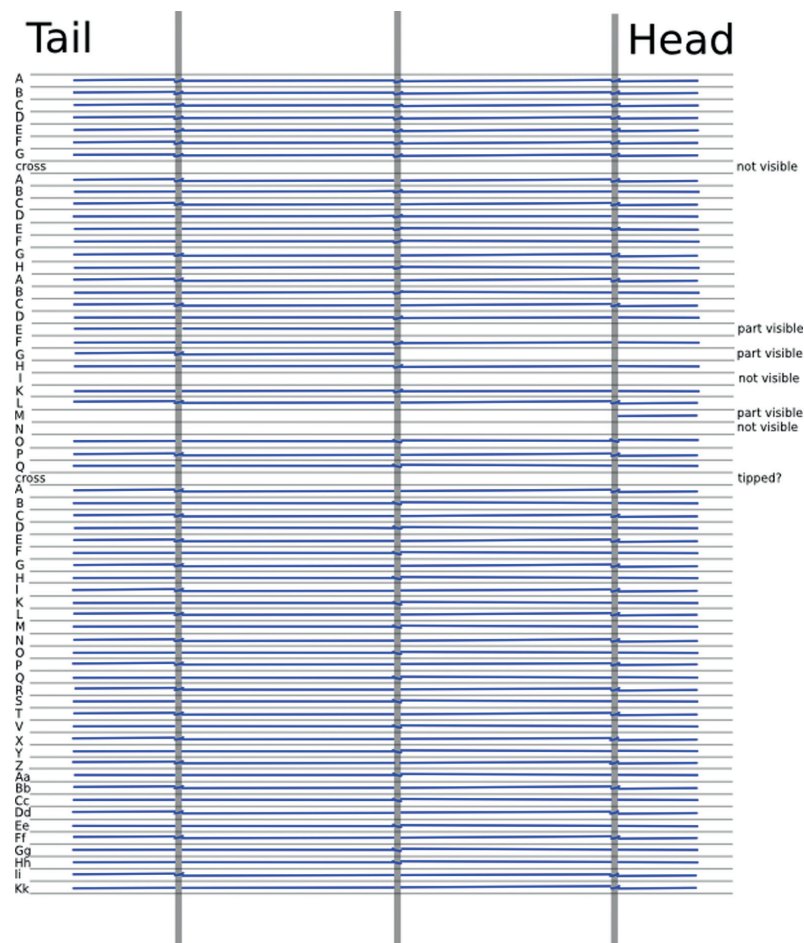


Fig 2: Sewing diagram.



Fig. 3: The central bifolium of gathering A of the SNML, showing the clean paper under the sewing thread.

bypass sewing found in this book is occasionally disturbed by binder error (see the sewing diagram, Fig. 2), a common occurrence at this period, when the number of books printed required increasingly rapid work from the binders, but every gathering is sewn with one or more of the supports bypassed. The bypass technique is found right to the end of the book-block, but the first 7 gatherings, which comprise the *SNML*, are all sewn all-along, that is to say, all of the sewing supports are sewn around in each of the gatherings. While it is



Fig. 4a: The left end of the central sewing support visible through a hole worn in the cover.

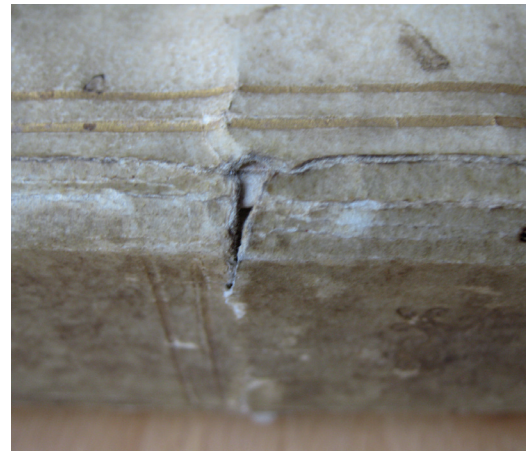


Fig. 4b: Damage created in the right joint by a central sewing support, with the current sewing support 8mm higher (arrow).

common that the first one or two, even three, gatherings (including the endleaves) in a bookblock might be sewn all-along to give extra strength to a structure along the joints of a binding, I am not aware of binders sewing as many as seven gatherings all-along in this way in the seventeenth century. In addition, it would be normal practise for approximately the same number of gatherings at each end to be sewn all-along, which is not the case here. There is no evidence of earlier sewing in either the *SNML* or the other editions. This would mean that if the *SNML* had been bound into this composite volume soon after the date of the most recent edition (1655), it would have had to have remained in unbound sheets for almost half a century. However, the grime now seen on the leaves of this part of the book



clearly postdates the sewing of the book (the paper under the sewing thread remains clean (see Fig. 3), yet is not found on the other texts. It is not clear how this could have happened to the leaves of the *SNML* had they not been sewn.

The position of the sewing supports also raises a serious question. The central sewing support lies at an angle across the spine, being 107mm from the head of the bookblock on the left joint and 99mm from the head on the right joint. This is not in itself significant, as many books can be found with this phenomenon, especially when, as here, the supports would have been virtually invisible under the cover when the book was new. However, the cover shows signs of the characteristic damage that often occurs to the parchment that lies over the ends of the sewing supports in this type of binding. On the left joint this coincides exactly with the end of the sewing support, which is therefore visible through the hole in the parchment (Fig. 4a). On the right joint there is a larger break in the parchment, but this is at 107 mm from the head of the bookblock and the actual sewing support is therefore 8mm higher (Fig. 4b). This discrepancy means that there is no mechanism within this sewing structure that could have produced the damage to the right joint of the cover. This in turn suggests that the cover may not be original even to the later editions now contained within it, and this, in turn, could explain the two creases found in the cover that cannot be related to the book in its present state that lie between the two spine creases. The exact match between the end of the sewing support and the hole in the cover on the left joint



*Fig. 5: The upper sewing support, viewed down the spine, the thinner left end, behind the *SNML*, being to the left in the photograph.*

could have been contrived when the *SNML* was sewn onto the rest of the bookblock, but the position of the sewing support on the right joint could not be 'adjusted' and therefore does not line up with the damage in the cover.

In addition, the sewing thread used for the *SNML* is very different in appearance from the thread used for the rest of the book. The latter, a relatively thin S-twist thread, was waxed or coated before use, a very common technique that protects the thread from being worn as it is pulled through the sewing holes in the gatherings, reduces the risk that it will twist as it is pulled through them and results in a thread with a clean, smooth, external surface with few, if any, straggling fibres. The thread used for the *SNML*, on the other hand,

although also a thin S-twist thread, has not been waxed and presents a rather 'fluffy' appearance when viewed under magnification.

Furthermore, the sewing supports when viewed down the spine (Fig. 5) present a very unexpected appearance. That part of the supports which lies behind the later editions contained within the bookblock is obscured by some sort of brown coating such as a thick synthetic adhesive, but has at its left end (towards the *SNML*) a sheath-like structure that completely hides the sewing threads wrapped around the support, which most certainly does not represent any known seventeenth-century sewing technique and the purpose of which is hard to explain unless it covers the attachment of extra lengths of sewing support to accommodate the *SNML*. The supports behind the *SNML* which emerge from the sheath, would appear to be single cords that are thinner than the rest of the support they appear to be part of, though they also are covered with a thick adhesive-like substance that almost

Fig. 6: The sewing thread in the final gathering bypassing sewing station 4.



Fig. 7: The spine lining joint visible at the head of the right joint.



completely hides the sewing thread. This thick coating is something also not known on seventeenth-century bindings of any European country, in which the sewing threads are always visible when not hidden by the covering material of a book, unless the entire spine is slathered with adhesive.

The final text gathering in the book has a sewing hole against the lowest sewing support on the spine (sewing station 4) which the thread, which is the same as in the rest of the later editions in the book, goes past. The thread shows no evidence of having once been taken through this hole, yet the hole has clearly been used in the past (Fig. 6). This must be the result of some unexplained disturbance of the structure.

The change of thread and sewing technique between the end of the *SNML* and first of the other editions bound into this volume indicates beyond reasonable doubt that the *SNML* has been inserted into a pre-existing bookblock.

## SPINE TREATMENT

The almost flat spine and the absence of joints are entirely typical of a mid-seventeenth century Italian laced-case binding, but the transverse spine linings of handmade paper are too clean and unmarked to be original. The clean, bright paper visible at the head of the gap between the right endleaves and the final printed gathering cannot have been in that position for three and a half centuries (Fig. 7).

## EDGE TREATMENT

The gauffered decoration of the edges appears to be quite consistent across the *SNML* and the other editions bound with it, and analysis of the gold shows no difference between the gold and the bole on the *SNML* and the rest of the bookblock. The head edge is also surprisingly clean for a book of this age, as in normal circumstances a book shelved vertically will inevitably accumulate dust and dirt on the head edge which will at the very least dull the gold. This indicates that the edges of the entire bookblock were cut, gilded and gauffered in a single operation, with the *SNML* already sewn in place. It might be argued that this shows that the *SNML* was always bound with the other editions, but as the sewing shows, this was not the case and the cutting and decoration of the edges must therefore be new, having followed the addition of the *SNML*. This would also have allowed the entire bookblock to be cut down to fit the cover. The evidence of the tie-down in gathering Ii of the last edition in the bookblock (see below) shows that the head must have been cut very little, but a turned-in corner on pages 139–40 of the 1655 *Risposta* shows that the fore-edge was cut before, and that at least 5mm was cut from the fore-edge when the *SNML* was added to the other editions.

## ENDBANDS

As the spine linings are new, it follows that the primary endbands sewn in silk with a front bead over alum-tawed cores must be new also, as the endband tiedowns pass through the linings. The unmarked appearance of the slips on the outside of the cover at the head and tail of the joints reinforces this conclusion. They are in a very exposed position, and given the wear evident in the cover itself, it is inconceivable that they could have remained unabraded over several centuries (Fig. 8). The purple-brown and yellow silk used to sew the endbands appears to have been purposely 'distressed' across the spine to make it look old, as well as being 'bleached' on the exposed areas across the cores and, in addition, soiled at the head. The colouring is uneven and appears not to penetrate the threads, suggesting that it has been coloured by hand. The yellow silk has been used to make the tiedowns at the head, but at the tail there are two tiedowns at the left end of the endband which use the purple-brown thread. This is a curious feature that does not fit with typical historical practice, but cannot be used to argue for authenticity or otherwise.

The tie-down between leaves Ii1 and 2 in the final edition in the volume has been caught on a crease in the paper and does not sit where an earlier tiedown has crushed the end of the spine-fold (Fig. 9). This type of deformation of the end of a gathering is typical of



*Fig. 8: The unmarked endband slip at the head of the left joint.*



*Fig. 9: The creased head end of gathering li of the final edition, with the new endband tiedown to one side of it.*



bindings where an endband has been pulled down and backwards by the manipulation of the cover and the tiedown has crushed the end of the spine-folds. Laced-case bindings that rely on the endband slips only to attach the cover to the bookblock are particularly prone to this sort of damage. If the current tiedown were to be moved to the 'original' position, it would be too long, and can therefore never have been in this position. This also shows that an earlier endband has been lost and has been replaced by the current one.

*Fig 10: Inside the left and right covers.*

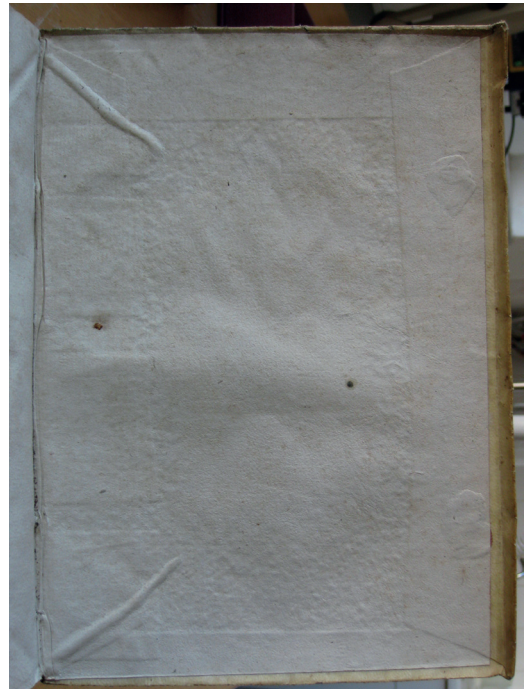
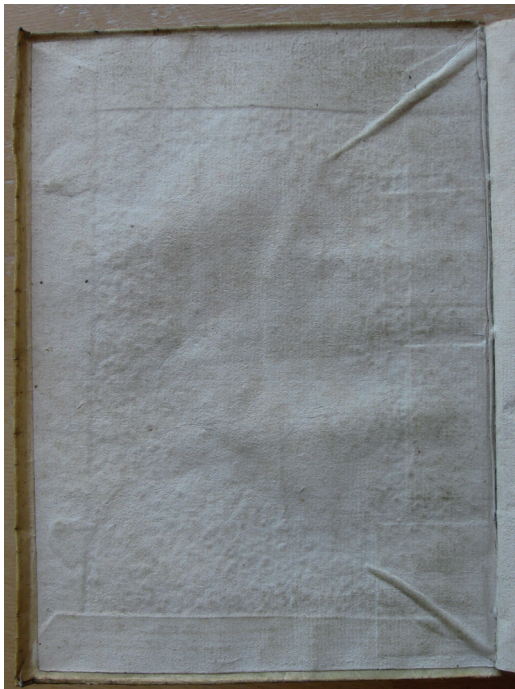






Fig. 11: A portion of a silk tie projecting from under the pastedown inside the right cover.

## BOARDS

The thin cartonnage boards are completely covered by the parchment cover and paper pastedowns and it is therefore not possible to comment on their appearance, beyond saying that the uneven surface shown under the pastedowns is typical for an Italian binding of this sort and age. They do not, however, show the distortion and damage evident on the parchment cover itself, suggesting that they too are not original to the cover (Fig. 10).

The fact that both boards have the stubs of silk ties trapped by the pastedowns on their fore-edges would suggest that they belong to the cover, but the cleanness of the broken ends visible through the punched holes in the parchment, and the small exposed portion of the lower tie in the right cover are again not what might be expected in a binding of this age and condition, but might have been contrived to establish a sort of casual authenticity for the binding (Fig. 11).

Fig. 12: The spine.

## COVER

The parchment cover is of a typically Italian type, taken from a skin with clearly visible hair follicles. It therefore comes either from a goat or a hair sheep. The gold-tooling was carried out with tools identified with the shop of the Soresini family in Rome, papal binders from the 1590s to about 1630.<sup>1</sup> It can be argued that the tools used might have remained in use after the 1630s long enough to be used in the 1650s, but this cannot overcome the other physical evidence to be found in the cover that indicates that the contents and the cover do not belong together. The spine has two creases that run from the head to the tail of the

<sup>1</sup> Paul Needham, *Galileo makes a book*, p. 186

spine, approximately 7mm in from the spine creases (Fig. 12). It is difficult to understand how these creases could have been formed on this bookblock, though it is not clear what purpose they could have served. The bookblock currently sits quite high in the cover, leaving a wider square at the tail edge than the head. This clearly suggests that the current attachment of the bookblock within the cover is of a relatively recent date (bookblocks in such bindings inevitably sag in their bindings over the years). The creasing and wear so clearly evident on the cover are not reflected in the condition of the *Opere*, which are generally quite fresh and undamaged around their edges (which is not surprising, given that they were cut and gilded when the *SNML* was added), which further indicates that the cover is not original to these editions.

## SUMMARY

The endleaves, spine linings and endbands are all of recent date, but could be said to be the result of legitimate repairs to an existing book.

The leaves of the *SNML* have not been beaten, though the rest of the bookblock has been. This indicates that the *SNML* is a later insertion.

The sewing of the bookblock is not consistent between the *SNML* and the other editions found in the cover, and the *SNML* is therefore a later insertion.

The other editions were sewn together at an early date, and have been sewn only once, as has the *SNML* which was sewn to match the other editions.

The gilding on the edges is the same across the *SNML* and the other editions. This can only mean that the edges were cut, gilded and gauffered after the *SNML* was added to the other editions. This would have allowed the whole bookblock to fit the cover.

There is evidence to suggest that the cover is not original to the later editions, and that the two were therefore 'married' at the time of the insertion of the *SNML*.